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LITHOGRAPHIC ABSTRACTS, DECEMBER 1961

PHOTOGRAPHY, TONE AND COLOR CORRECTION

655.302

USE OF COLOR SYSTEMS IN GRAPHIC ARTS. Carl E. Foss. Proceedings "Color Problems in the Graphic Arts" A Symposium of the 25th Annual Meeting of the Inter-Society Color Council, New York, Spring 1956, pp. 129-135 (7 pages). Use of color systems can simplify work in the graphic arts. Such systems are described in general terms. Efforts to study the gamut of colors produced by printing as made by Huebner and Chanko and recently in Germany are described. Using a nine-step halftone scale and 3 process colors, 1000 samples are produced. Others are described briefly.

655.302

COLOR PROBLEMS IN THE PRESSROOM. Gordon Dalsemer. Proceedings "Color Problems in the Graphic Arts" A Symposium of the 25th Annual Meeting of the Inter-Society Color Council, New York, Spring 1956, pp. 55-66 (12 pages). Pressroom variables are listed as those caused by: 1. materials; 2. machines; 3. lighting; 4. personnel. Customers want faithful reproduction and uniformity. Paper is made with a minimum of testing, leaving many properties to craft and skill, resulting in pressroom problems in whiteness of paper, among others. Some ink color problems are due to the limited colors available with which to make inks. Machine problems are being overcome. Instruments and controls can be helpful but personnel should not relax their vigilance because of them.

655.302

TONE REPRODUCTION IN GRAPHIC ARTS PROCESSES. Warren L. Rhodes. Proceedings "Color Problems in the Graphic Arts" A Symposium of the 25th Annual Meeting of the Inter-Society Color Council, New York, Spring 1956, pp. 23-36 (14 pages). The terminology of color and its reproduction is explained. (Hue, saturation, brightness, tones, contrast, density, tone reproduction curves). The tone reproduction curve is used to show the nature of reproduction as representing offset, letterpress and conventional gravure. These differences are explained in relation to the methods used in each process and illustrated with photomicrographs of prints. The method is briefly extended into color reproduction. 17 illustrations.

771.351

A NEW PROCESS LENS. J. Schilling. The Litho-Printer 4, No. 7 July 1961, p. 445 (1 page). The lens is the Apo-Germinar with a symmetrical type of construction. Advantages are cited and diagrams show lens construction, distortion and chromatic lateral aberation. The cross section shows a six element, uncemented construction. 3 diagrams.

655.302

FAST SEPARATIONS FOR PROCESS COLOR. Anon. Canadian Printer & Publisher 70, No. 3, March 1961, P. 72 (1 page). Newspaper photographer makes color-separated prints in 2½ hours with enlarger, cuts camera-to-stereotyping time to 4 hours. Method starts with a single color negative and ends with three black and white prints. Details are given. 1 illustration.

655.302

LIGHTING FOR COLOR CONTROL. Warren B. Reese. Proceedings "Color Problems in the Graphic Arts" A Symposium of the 25th Annual Meeting of the Inter-Society Color Council, New York, Spring 1956, pp. 101-128 (28 pages). The apparent color of a reflecting

surface, such as printed matter, is determined by: 1. reflectance characteristics of the surface; 2. spectral composition of light by which it is illuminated. Spectral characteristics of a light source must be known in full, i. e. a spectral curve. Color temperature can be misleading. Several viewpoints influence choice of a standard light source. These are presented at some length. 12 references, 13 illustrations, charts or tables.

655.302

THE SCANNER IN COLOR REPRODUCTION. Vincent C. Hall and Joseph G. Jordan. Proceedings "Color Problems in the Graphic Arts" A Symposium of the 25th Annual Meeting of the Inter-Society Color Council, New York, Spring 1956, pp. 37-53 (17 pages). Color scanning attempts to give satisfactory reproduction for every possible color in an original, not necessarily the same color or tone value. Scanner development started in the '30's with Murray of Kodak and Hardy of MIT. The necessary functions are listed and the coverage of these functions by 5 different scanners is shown graphically. Functional diagrams show how the Crosfield and Time-Life scanners perform. Masking and electronic methods are compared, under-color removal explained, density range compression, color gamut, etc. illustrated by means of diagrams or formulae. Scanners are dedicated to the idea that color reproduction in translating an artist's original into a graphic arts reproduction should conform to fairly well definable laws. 11 illustrations.

655.302

PLEASING COLOR PRINTING. Gyan P. Madan. Printing Production 91, No. 10, July, 1961, pp. 36-37, 86-87 (4 pages). A report on results of additional work on the masking phase of this color method. The single mask for the transparencies are made through different filters to match the characteristics of the transparencies. Three examples are worked out to illustrate the results and tables give exposures, development, densitometer readings, etc. Results are reported as better than using the same filter in making the single masks for all kinds of transparencies. 4 tables.

655.302

HOW TO DETERMINE MASK PERCENTAGE FOR COLOR-CORRECTION. Gyan P. Madan. Graphic Arts Monthly 33, No. 7, July 1961, pp. 24-28 (5 pages). Proper mask strength is necessary for satisfactory color reproduction. It governs the color correction obtained and helps in the selection of transparencies of the proper density range for the printing process used. Methods of calculating mask percentages have been put forward by Kodak, duPont and LTF. Some simplified calculations are given, also a monograph to perform the calculation. The LTF method based on the actual ink used is also given and the concept of balanced inks explained. 3 references, 1 chart, 2 tables.

771.448

ADVANTAGES OF ELECTRONIC FLASH. Herbert P. Paschel. Modern Lithography 29, No. 7, July 1961, pp. 49-50, 95 (3 pages). In answer to a question as to why electronic flash is popular in Europe in making separations from transparencies, author gives the claimed advantages of the method. The first is improvement in highlight and shadow rendering. The second is more evenly balanced separation negatives.

667.5

COLOR MATCHING AND CONTROL OF PRINTING INKS. Charles R. Conquergood. Proceedings of the 25th Annual Meeting of the Inter-Society Color Council, New York, Spring, 1956, "Color Problems in the Graphic Arts" - A Symposium, pp. 79-90 (12 pages). Drying methods of the various vehicles are described briefly. The problems of color matching are illustrated by explaining how different inks would have to be prepared to represent the color of one commodity on different forms of packaging by different printing processes on different papers or boards. Pigment requirements for these and other situations are described as - water resistant for lithography, light fast for a billboard, etc. Control in ink manufacture rests largely in formula records and testing. Methods used in color matching in making inks are described briefly.

655.302

COLOR PRINTING METHODS IN GRAPHIC ARTS. Marvin C. Rogers. Proceedings "Color Problems in the Graphic Arts" A Symposium of the 25th Annual Meeting of the Inter-Society Color Council, New York, Spring 1956, pp. 8-22 (15 pages). A review of methods to serve as a groundwork for the other articles in the symposium. Letterpress, lithography and gravure printing methods are explained and a few words given on screen process. Examples in commonly known publications are cited. Halftone and gravure methods of producing gradation and multi-color production of process color are also explained. How the different processes are related to this work is discussed.

PLANOGRAPHIC PRINTING PROCESSES

655.325

TACKY COATINGS, STAINING OF STAGING LACQUERED AREAS. Eugene C. Bulinski. Graphic Arts Monthly 33, No. 7, July 1961, pp. 124, 26, 28, 30 (4 pages). Answers are given as to how to avoid these troubles which appeared even after plant was air conditioned. Tacky coatings can be avoided by waxing the plate immediately after removing from whirler. Several suitable materials and procedures are described. The procedure in the staging problem is also described.

655.326

PRESSMEN DISAGREE ON GRAIN. Frank P. Arbolino. Modern Lithography 29, No. 7, July 1961, pp. 59, 99 (2 pages). Pressmen are more inclined to complain about the grain of their plates when in trouble. This is likely to be due to water troubles. It has been amply demonstrated that with proper settings the grainless plates give the best results.

655.328

*APPARATUS FOR PREVENTING THE EMULSIFICATION OF OFFSET INKS. Poligraf. Proizvodstvo (in Russian); Papier u. Druck, Vol. 8, No. 5, May 1959, Druck u. Repr., p.67 (in German). Printing Abstracts, Vol. 14, No. 9, September 1959, page 727. The construction and operation of this unit, developed at the Institute for the Graphic Arts, Moscow, is indicated. It consists of an air blast apparatus which is fitted with a heater. This air is preheated to 60-65°C. and is piped to the distributor rollers. The warm current of air increased the rate of evaporation and the water content of the ink is reduced by more than half.

655.322

BLACK AND WHITE BY OFFSET. C. Stewart. The Litho-Printer 4, No. 7, July 1961, pp. 392-393 (2 pages). Improved techniques make it possible for lithography to produce clean, sharp type matter and other black and white work to get away from the "gray medium" idea. Too few plants can boast of really good black and white. Some of the requirements of good work are: good originals, good preparatory and camera work, good paperstock, and good press work. Work done in the U. S. using two printings of black ink is mentioned.

PAPER AND INK

655.308

SHEETING FROM PAPER ROLLS IN LARGER PRINTING PLANTS. Anon. Printing Production 91, No. 10, July 1961, p. 67 (1 page). The urge to do this is based on economy and possibility of getting square dimension sheets. Advantages and disadvantages are given. Sheeting directly from the roll directly at the press is also discussed.

655.306

HOW PAPER AFFECTS FORMULATION OF PRINTING INK. Joseph Krause. American Ink Maker 39, No. 8, August 1961, pp. 28-29 (2 pages). Formulation of printing ink depends on many factors: method of printing, type of press, speed of operation, surface printed on, drying and end use of product. Of these the relationship between paper and ink is most important. Inks for hard stocks like bond and ledger are heavy and tacky, on softer stocks like coated, M.F., or news are softer and less tacky. Rough stocks require heavy and short bodied inks. Other surfaces and considerations discussed similarly include: vegetable parchment, glassine, gloss, varnishing, soft absorbent stocks, various coated stocks, variations in whiteness, pH, alum-residues, fluorescent papers, etc.

676.286

WORLD NEWSPRINT SUPPLY-DEMAND. OUTLOOK THROUGH 1961. Anon. Union Calendar No. 750, 86th Congress, 2nd Session, House Report No. 1669. Received November 3, 1960. 30 page pamphlet which analyzes worldwide consumption and production. Numerous tables of statistics.

667.5

INK: SCIENCE WITHIN THE GRAPHIC ARTS. Anon. Packaging Progress 3, No. 5, August 1961, pp. 48-51 (4 pages). Advances in modern printing techniques and the increasing use of new materials by packagers and designers place an ever increasing demand on the ink manufacturer. Research has resulted in quicker setting inks, inks that can be used on plastic films, inks with better fade resistance, better rub resistance and other desirable properties. 6 illustrations.

655.305

HOW A NEWSPAPER ACCOMPLISHES INK MIST ELIMINATION IN ITS PRESSROOM! Horace H. Parker. Graphic Arts Monthly 33, No. 7, July 1961, pp. 36, 38, 40 (3 pages). Higher speed presses have brought the ink misting problem beyond the nuisance stage. The ANPA Research Institute Bulletin No. 61 of October 21, 1952 analyzes the problem. Author's paper bought a higher speed press, enquired of others with the same press, anticipated an ink mist problem. They planned for this with an air duct system which drew the air away from the sources of the misting. This proved successful. Details are given.

655.309

RAILROADS INVESTIGATE PAPER ROLL DAMAGE. H. H. Slawson. Modern Lithography 29, No.7, July 1961, pp. 60, 91 (2 pages). Roll stock must be in near perfect condition for web press operation. The railroads have paid much in claims on damaged paper and are investigating causes of damage. Causes checked included too high stacking of horizontal rolls, clamp trucks used in handling rolls and defective freight cars.

676.2

SCIENCE IN PAPERMAKING. William H. Bureau. Graphic Arts Monthly 33, No. 7, July 1961, pp. 42, 43, 140, 142 (4 pages). A survey of scientific applications in the paper industry. Newer developments include power saws in the woods, cold soda pulping with its higher yields, hardwood sulfite pulp which adds desirable properties to paper, new bleaching agents, new refining methods which eliminate the beater, new paper machines, dirt removal, closer control over moisture content, newer additives and sizes, newer synthetic fibers. Coating is pointed out as the area of some of the greatest advances with coating in the size press, cast coating, trailing blade coating and new latices and binders.

676.288

PAPERBOARD QUALITY POINTERS. P. W. Sherwood. The Litho Printer 4, No. 7, July 1961, pp. 425-426 (2 pages). Properties desired are surface smoothness, ink receptivity, formation, compressibility, opacity and brightness. The significance and testing of each of these are discussed.

667.5

*IMPROVEMENTS IN QUICK-DRYING VEHICLES, PARTICULARLY PRINTING INKS. Benjamin L. Sites and M.S. Agruss (Miehle-Goss-Dexter, Inc.) British Patent 861,404 - granted February 22, 1961. Interchemical Corporation - Central Research Laboratories - Patent Abstract Bulletin 24, No. 4, July-August 1961, p. 84. A non-aqueous quick-drying vehicle, more particularly printing ink, which comprises a binder of the drying oil type having a conjugated system of double bonds, and an oil-soluble dye capable of initiating rapid polymerization of the binder when activated by irradiation with cold energy.

676.27

THE DELAMINATION RESISTANCE OF POLYMER-IMPREGNATED PAPERS. K. V. Sarkanen, T. C. Lee and V. Stannett. TAPPI 44, No. 8, August 1961, pp. 580-586 (7 pages). A detailed study of the various factors affecting the peeltype delamination strength of untreated and polymertreated papers has been made. This property shows a maximum at between 35 and 50% R.H.; it is independent of straining rates at high rates but drops off considerably at very slow rates. This latter effect is attributed to viscous flow and viscoelastic deformations. The effect of different types of polymers on the delamination strength varies; hard, nonfilm-forming and soft-flowing polymers, bring about only minor improvements; whereas tough, rubbery polymers impart excellent strength to papers. Polyvinyl acetate also confers excellent delamination-resistant properties to paper and the possible reasons for its good performance are discussed. The medium from which the polymer is applied is important, latices and benzene solutions being superior to water-containing solvent systems. Finally, the effect of the degree of orientation in the paper was studied and it is shown that considerable improvement in the delamination strength can be brought about by increasing the amount of Z-oriented fibers. 11 references, 8 graphs, 3 tables.

667.5

PROGRESS REPORT ON WATER BASE INKS. A.E. Yelmgren. ANPA Research Institute,Inc. - Mechanical Bulletin, No. 744, July 28, 1961, pp. 119-121 (3 pages). Several experimental runs are reported. Smudging appears to be a problem. The oil in emulsion inks permits misting and rub-off. A problem with present inks is halftone fill-in, necessitating brushing of plates. Some advantages of water base inks would be: easy cleaning, absence of toxic and flammable solvents, reduction of smudging, misting and strike-through. Other points are discussed.

655.326 : 655.329

THE RHEOLOGY OF WEB OFFSET INKS. D. W. J. Oesterveld. The Litho Printer 4, No. 7, July 1961, pp. 408-9, 12, 15 (4 pages). Two types of presses are considered: the blanket-to-impression-cylinder type and the blanket-to-blanket type. These are described and illustrated. Rheology and thixotropy are explained. The form of the pigment particle has an influence on thixotropy. Flocculation and picking characteristics are other ink phenomena discussed. Pigments which cause flocculation give inks with little tendency to thixotropy. Other interrelationships are discussed. 4 diagrams or charts.

LITHOGRAPHY - GENERAL

655.329

GLAMOUR OF WEB OFFSET IS NO REASON FOR USE. Anon. Printing Production 91, No.10, July 1961, pp. 59, 87 (2 pages). Work available should be the governing factor. Report of starting experiences with some cost figures, waste percentages, etc. as given at the R & E Council meeting. After six months, process color on coated stock is equal to sheet fed.

655.7 : 655.329

STANDARDIZATION IS KEY IN WEB BOOK FIELD. Anon. Modern Lithography 29, No. 7, July 1961, p. 74 (1 page). Report on the activities of a committee studying the problem. A questionnaire had been sent to 130 web-offset plants. Some results of the survey are given briefly, as most of the presses were in the 22 3/4 X 35 to 36 X 50 size range. Sixty pound paper was most common, most runs ran between 25,000 and 40,000, etc. Standardization of book sizes saves on roll changes.

655.7 : 655.329

HOW TO EVALUATE PROPOSED CHANGE TO OFFSET PRINTED NEWSPAPERS. Herbert E. Phillips. Printing Production 91, No. 10, July 1961, pp. 52-54,60,61 (5 pages). An analysis of a changeover should consider best methods to use, size and kind of equipment to buy for each step of the process and what employees are needed. These points are considered for several phases of newspaper production: type composition, camera work and illustrations, employee training for the press, etc. Different methods are described for several steps.

655.7

HOW A MAJOR PUBLICATIONS PLANT OPERATES. Mildred Weiler. The Inland and American Printer and Lithographer 147, No. 4, July 1961, pp. 80-81 (2 pages). Story on the Hannibal, Mo., plant of Western Printing & Litho Company which specializes in year books, publications, trading stamps and text books. In year book work, plant provides an editor's kit which simplifies the school editor's work, but fits into the production pattern of the plant. Assembly line production is geared to short runs averaging 325 copies. Production methods are described. A similar method has been worked out for editors of house magazines. Plant is all offset. 3 illustrations.

655.329

WHY OFFSET. James H. Lamade. ANPA Research Institute Mechanical Bulletin No.745, August 4, 1961, pp. 127-9 (3 pages). The business manager of the Williamsport (Pa.) Grit explains reasons for his paper's change to a web offset press. The paper has been seeking a better printing method for over 20 years. Dry offset and flexography were considered. Study was directed at improved newspaper letterpress and at other printing methods. In 1957, it was concluded that web offset alone offered promise, at least eight years in the future. Speed and quality came with unexpected promptness. A survey showed that color would be necessary. R.O.P. color was not adequate. The change involved a move to a new site. Other details are given. The new press should be in operation by mid-1962.

655.328 :655.326

ASSURING EFFICIENT INKER UNIT OPERATIONS. William E. Yochheim. National Lithographer 68, No. 7, July 1961, pp. 36-37, 42, 44 (4 pages). Specific suggestions are offered in the care and maintenance of inker units. It is pointed out that the inking operation is an exacting procedure, commanding a high level of respect. A record or chart on the cleaning and replacement of each roller is one suggestion. Other points covered are the setting and adjustment of rollers and fountains. 2 illustrations.

655.32 :655.04

HOW TO KEEP A CLEAN OFFSET PLANT. Charles W. Latham. The Inland and American Printer and Lithographer 147, No. 4, July 1961, pp. 62-63, 113 (3 pages). Good housekeeping requires planning; such as a list placing responsibility for designated areas. Written rules should cover what should be done. Specific suggestions are given for certain problem areas. 4 illustrations.

655.329

WEB-OFFSET PRESSES. John B. Scouller. Modern Lithography 29, No.7, July 1961, pp. 22-28 (7 pages). More web-offset presses have been built in the past five years than in the preceding 25, and this trend will continue. The presses offered by some 25 different companies, domestic and foreign manufacturers and importers, are described briefly. Presses include all types, publication, business forms,etc. 28 illus.

655.326

BLANKET PACKING CUTS COSTS, DAMAGE. Canadian Printer & Publisher 70, No. 3, March 1961, p. 73 (1 page). A wide variety of printing surfaces posed offset blanket problems. Pressman found that by using rubberized cloth as offset blanket packing, packing paper costs were cut in half, packing creep minimized and blanket damage from smash-ups reduced. 2 illustrations.

655.326

CORRECT PRESSURE SETTINGS. Victor J. Shaw. National Lithographer 68, No. 7, July 1961, pp. 28-29, 42 (3 pages). "In order to achieve high quality work one must check plate, blanket and back cylinder pressures before each job." Directions are given for constructing a simple gauge for checking blanket and plate packing to the bearers. A squeeze of .002 to .004 in. is recommended. Some consequences of improper packing are cited. 3 illustrations.

655.04 : 655.329

THE WEB-OFFSET PRESS AND THE SAFETY CODE. E. Q. Mead. Graphic Arts Monthly 33, No. 7, July 1961, pp. 68, 70, 72, 74 (4 pages). The American Standard Safety Code for Control and Signaling Devices for graphic arts presses was approved in 1954 before there were many web-offset presses. The author reviews the code with particular references to web-offset, more particularly, publication presses. The function, order and color of push buttons are given for "Safe", "Ready", "Faster", "Slower", "Inch", and "Stop". These are discussed and certain other buttons such as "Reverse", "Reset" and "Preset" are mentioned. Uniformity throughout a shop is urged in the interest of safety.

GRAPHIC ARTS - GENERAL

655.82

HOW TO MEET ABA SPECIFICATIONS FOR MAGNETIC INK CHECK PRINTING. Anon. Printing Magazine 85, No. 7, July 1961, p. 44 (1 page). A high degree of precision is required in this work. A set of specifications has been issued as a guide and suppliers offer practical aids. Chief troubles are voids, embossure and format. These are explained and precautions given. 4 illustrations.

655.82

ANSWERS TO QUESTIONS MOST OFTEN ASKED ABOUT MAGNETIC INK PRINTING. Anon. Printing Magazine 85, No. 7, July 1961, pp. 82-83 (2 pages). A series of 13 questions with answers. Some of the questions are on ink additives, colors, processes, press speeds, drying, shelf life of inks, etc.

655.37

ELECTROSTATIC PRINTER PROMISES VERSATILITY. Anon. Electronic Design 9, No. 17, August 16, 1961, pp. 34-35 (2 pages). A brief news report on equipment developed at Stanford Research Institute. Dry-ink-and-resin dust and heat fixation are used. In comparison with a standard printing press, equipment should weigh and cost only half as much.

655.28

COMPUTER USED WITH PHOTON, TYPEWRITER IN MIT PROCEDURE. Anon. Printing News 67, No. 6, August 5, 1961, pp. 13-14 (2 pages). Description of an integrated arrangement of the Flexowriter tape punching typewriter, a computer and the Photon photocomposing machine with which it will be possible to handle updating and reprinting problems. The computer handles problems in arranging entries in proper order and in preparing an index. Future use in catalogs, directories, encyclopedias is forseen.

655.309

PREVENTING WEB TEARS. Anon. The Litho Printer 4, No. 7, July 1961, p. 407 (entire article given here). A system discussed in Polygraph magazine states that a French patent by Zeimer and Bisanti offers a method of preventing web tears by attaching reinforcement strips to the edges of webs. Strips are made of flexible non-tear material and are applied from a dispenser. The strips are claimed to reduce stress on the fast moving webs. Instead of continuous strips being applied to the web edges, it is possible to apply short pieces of strip at regular intervals and of regular length. A polyvinylacetate emulsion is employed to fasten the reinforcing strips to the web and after passage through the machine the strips are peeled off by means of a simple mechanical device. Double metallic strips may also be applied by means of an electric device and the strips would then be released after printing by removing magnetic force. No details are given to indicate to what extent printing quality and cylinders would be affected by this method of web protection. 1 diagram.

655.314

WRAP-AROUND LETTERPRESS - NEW LIFE FOR AN OLD PROCESS. Anon. New England Printer & Lithographer 24, No. 8, August 1961, pp. 39-43 (5 pages). To be competitive, letterpress demanded a rotary press offering higher production speeds, less makeready. Developments of flexible letterpress plates and presses that could take these plates made the answer possible. Today this industry is realizing a new potential with some wrap-around already in use, more in production. Harris, Miehle and Heidelberg presses are now available. Plates can be metal or plastic such as Dycril. 4 illustrations.

655.82

PRINTING FOR MICR. John Pettee. Printing Magazine 85, No. 7, July 1961, pp. 42-43, 45, 52 (4 pages). The rapid growth of volume of checks used (8 billion in 1950, 12 billion in 1960, estimated 22 billion in 1968) has encouraged electronic data processing of checks. The E-13 B font and its use are explained briefly. Some points of interest to the printer are discussed, such as size of printer to go into that work, investment in testing equipment, special problems, papers, etc. 2 illustrations.

655.02

PLANNED GIANT MOVE WITH WOOD MODELS. Robert Dyment. Canadian Printer & Publisher 70, No. 3, March 1961, pp. 57-9 (3 pages). Story on how a boxmaking firm had to move 500 machines to a new combined plant. With the aid of a floor plan and little wooden blocks representing the equipment, the move from three separate plants into one was carried out while the staff kept producing. 2 illustrations and a floor plan.

655.36

WHY THE BOOM IN SCREEN PROCESS MEANS BETTER BUSINESS FOR PRINTERS. Robert H. Vandenbossche. Canadian Printer & Publisher 70, No. 5, May 1961, pp. 52-3 (2 pages). Screen process is booming. This includes much combination work involving letterpress or lithography. Some of the work done is described. Plans for a technical information bureau in connection with the Screen Process Printing Association International are described and LTF is mentioned as its model.

655.02

MAKE PLANS EARLY IF FORCED TO MOVE. Arthur H. Gratz. Printing Magazine 85, No.7, July 1961, pp. 78, 81 (2 pages). A new master plan for Pittsburgh put a highway through the author's plant. A fifteen-point plan was laid out covering costs, location of market, personnel, timing, etc. How the plan is working out is discussed.

655.02

SMALL PLANT BUILT FOR EFFICIENCY. J. H. Reed. Printing Magazine 85, No. 7, July 1961, p. 59 (1 page). Story on a modern plant designed for a small combination operation in San Antonio. Press equipment consists of 2 platens, 2 verticals and a small offset. A layout and two illustrations are given.

607.2

ECONOMICS OF INDUSTRIAL RESEARCH DEVELOPMENT. Yale Brozen. Research/Development 12, No. 8, August 1961, pp. 64-66, 68, 75 (11 pages). "In the past decade, research and development performed in industrial laboratories in the U. S. grew at a fantastic rate, nearly three times as rapidly as Gross National Product." Reasons are given as to why this growth is expected to slow down. Some economics on return on investment in R & D compared to other returns are given. Six tables show relation of R & D investments to sales, returns, etc. Paper and allied products appear far down the scale, well below the average for all manufacturing and printing is not even listed.

655.312 : 772.93

ELECTROFAX. F. J. Stanczak. ANPA Research Institute, Inc. - Mechanical Bulletin, No. 744, July 28, 1961, pp. 118-119 (2 pages). Description of an electrophotographic process which produces a resist for photoengraving. A joint research program of ANPA and RCA has been developing the process. Resist is suitable for use with Dow etch. Process has reached field trials. Economies over normal processes are indicated.

655.31

LETTERPRESS TODAY AND TOMORROW. Richard Hundley. Photoengravers Bulletin 50, No. 7, February 1961, pp. 9-14 (6 pages). Author considers that, "We are on the threshold of a whole new era of letterpress printing." In the recent past lithography has had the advantage of greatest publicizing and newer equipment. Pre-press and on-press letterpress makeready are discussed in terms of modern developments which have brought about great improvements. Presses and plates are discussed. The future of letterpress will lean heavily toward electronics, photomechanics, wraparound plates and rotary letterpresses.

655.305

PRINTERS WARNED ABOUT BENZENE. Leroy Brewington. The Publishers' Auxiliary 96th Year - No. 27, July 8, 1961, p. 3 (1 page). Benzene, also known as Benzol, can be confused with Benzine. It is used as a solvent for oils, greases, gums and resins. Poisoning can occur by breathing the vapers and unpleasant effects follow contact with the skin. Sixteen protective measures are listed.

655.04

CLOTHES MAKE THE MAN -- SAFE. Joseph Kirschbaum. Printing Production 91, No. 10, July 1961, pp. 44-45 (2 pages). Deficiencies in work clothing can be: dirty clothes that cause skin rashes, oily clothes that can catch fire, sleeves or loose garments that can catch in machinery, etc. Figures are given on accidents due to unsafe dress. Advice on safe uniforms can be obtained from the Institute of Industrial Launderers, 1833 Jefferson Place, N. W., Washington, D. C. 2 illustrations.

655.2

HOW FAR SHOULD PRINTERS FOLLOW COPY? John M. Maddigan. Printing Production 91, No. 10, July 1961, pp. 32-33, 55, 61 (4 pages). Copy without errors is rare. Opinions on how far to follow copy vary widely from following exactly without question to changing copy if it is wrong. One example is a company which has a proofreader for its copy before it goes to the printer. Others ask printer to follow copy but feel free to make suggestions. Trade practices are cited. A variety of opinions on the subject are cited.

655.07

*ON THE MAIN LINES OF THE DEVELOPMENT OF PUBLISHING TECHNOLOGY IN THE U.S.S.R. B. S. Gorbacevskii. Poligraph. Proizvodstvo. No. 12, 1960, pp. 6-8 (in Russian). Printing Abstracts, Vol. 16, No. 8, August 1961, page 449. After a brief survey of developments in the U.S.A. and England, future developments in the five main methods of preparing original copy are indicated: (1) perforated tape for automatic setting; (2) copy for semi-automatic line setting; (3) copy for indirect reproductions; (4) photo-forms and (5) original printing forms, the publishing firm producing the original copy so as to avoid duplication. Electronics will play an important part in the mechanization of publishing plants: electronic calculators for determining the length of line and size of the publication, electronic translating machines and electronic composing machines. The probable developments in the Soviet Union in this direction in the next 10-15 years are tabulated.

655.7

HOW TO AVOID HEADACHES IN THE BINDERY. Leon Siegel. National Lithographer 68, No. 7, July 1961, pp. 30-31, 47 (3 pages). Suggestions on how to plan and print a job so that it will not go sour in the bindery. The first is to "consult with your binder before it is too late." Some other points involve paper grain, imposition, paper off square and keeping up-to-date on what new equipment your binder has and what it will do for you. 2 illustrations.

655.09

PRINTING EXECUTIVE CONDUCTS OWN RESEARCH STUDY TO FORECAST SALES TREND TO 1966. S. F. Terillo. Printing News 67, No. 9, August 26, 1961, pp. 13, 14, 19 (3 pages). Figures are given gleaned from such sources as Census of Manufacturers and National Paper Trade Association. Based on these figures and using the least squares method, printing sales are forecast through 1966. A ten billion dollar volume is indicated for that year. 3 graphs, 2 tables.

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